## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 5
Superfund Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

EPA Region 5 Records Ctr.

DATE: December 22, 2000

**SUBJECT:** Sample Results, DuSable Park

FROM: Larry Jensen, CHP

Regional Radiation Expert

**Emergency Response Section 3** 

TO: Lindsay Light II Team

I received sample results on two soil samples and on a "stone" from DuSable Park that Verneta and I collected. We were accompanied by a Chicago Parks District staff member, Chuck Weber.

The results show one soil sample above our total radium cleanup level and the "stone" highly above criteria.

## Soil sample #1

Total radium is 3.65 picocuries per gram (pCi/g), below the 7.1 pCi/g cleanup criterion.

Europium - 155 is shown at 0.27 pCi/g which is not normally seen in soil spectra but is a constituent of rare earth ores, like monazite, the Lindsay Light ore.

## Soil sample #2

Total radium is 11.2 pCi/g of which 10.4 pCi/g is the thorium radium. Europium - 155 is also shown in this at a low level (less than 0.2 pCi/g).

## "Stone"

Total radium is 10,420 pCi/g of which 10,300 pCi/g is the thorium radium. Europium - 155 is 440 pCi/g which is much elevated over the soils. (I don't know what might be considered a normal soil level. I'll check. I know this radionuclide has never appeared in any soil samples I've had analyzed over my tenure at EPA.).